

Stems 3.9(1.8–6.0) m long. Leaf rachises 92.2(55.0–124.0) cm long; pinnae 12(7–18) per side of rachis.

**Distribution and habitat.** From 7°19'N–13°31'S and 70°07'–78°57'W in the Cordilleras Central and Oriental in Colombia and eastern Andean slopes in Colombia, Ecuador, and Peru at 1064(400–1750) m elevation in lowland or montane rainforest (Fig. 6).

**Subspecific variation.** Regression shows there are significant associations between elevation and one stem, four leaf, and one inflorescence variables. Squared multiple *R* for the regression of stem height on elevation is 0.30, sheath length 0.88, number of pinnae 0.42, basal pinna width 0.37, apical pinna length 0.69, and rachilla width 0.13. Values for these variables decrease with elevation, except for number of pinnae and rachillae width which increase.

The northernmost population of subsp. *synanthera* occurs in the Cordilleras Central and Oriental in Colombia and has 13–17 rachillae per inflorescence. The northernmost specimen (*Soejarto 2743*) is tentatively included here; it is unusual in having only 4 rachillae. One specimen (*Callejas 4221*) appears to be a mixed collection, with the fruits (excluded from this study) belonging to *P. sanhuisensis*.

Along eastern Andean slopes in Colombia, Ecuador, and Peru, subsp. *synanthera* occurs in scattered localities. There do not appear to be any differences between these populations although sample size in small in some of them. The gaps between them may anyway be collecting artifacts. In Amazonas and Cajamarca, Peru, there is extreme variation. Two specimens (*Diaz 8093*, *Rodriguez 1013*) are the smallest seen with narrow pinnae and slender inflorescences with the rachillae 19.0–22.5 cm long and 4.0–4.3 mm diameter. Another specimen (*Campos 4243*), from less than 40 km away, has the some of the largest rachillae seen in the subspecies, 34.0 cm long and 9.6 mm diameter. Other specimens from this region are more usual in size. This kind of variation is reminiscent of that seen in *Geonoma poeppigiana* from the same region (Henderson 2011). It is also of interest that *Pholidostachys amazonensis* occurs in this same region, and only differs from subsp. *synanthera* in its spicate inflorescence.

## 7.2 *Pholidostachys synanthera* subsp. *robusta* (Trail) Henderson, *comb. & stat. nov.*

Basionym:—*Calyptronoma robusta* Trail (1876: 330). *Calyptrogynne robusta* (Trail) Burret, (1930: 137). Type:—BRAZIL. Amazonas: Camana, Rio Javari, 5 December 1874, *J. Trail 961/CLXXXVI* (holotype K!, isotypes BM!, NY!, P *n.v.*).

Stems 2.6(1.0–6.0) m long. Leaf rachises 74.1(48.0–91.0) cm long; pinnae 7(4–12) per side of rachis.

**Distribution and habitat.** From 0°34'N–6°28'S and 68°46'–75°50'W in the western Amazon region of Colombia, Peru, and Brazil at 146(90–200) m elevation in lowland rainforest (Fig. 6).

## References

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